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TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

December 21, 2012

MR CRAIG ECKBERG
SENIOR MANAGER ENVIRONMENTAL BUSINESS
NRG TEXAS POWER LLC
1201 FANNIN ST
HOUSTON TX 77002-6929

Re: Permit Alteration
Permit Number: 7704
W A Parish Electric Generating Station Unit 8
Thompsons, Fort Bend County
Regulated Entity Number: RN100888312
Customer Reference Number: CN603207218
Account Number: FG-0020-V
Associated Permit Number: PSDTX234M2

Dear Mr. Eckberg:

This is in response to your letter received October 26, 2012, requesting alteration of the conditions and maximum allowable emission rates table (MAERT) of the above-referenced permit. We understand that you want to revise the permit to reflect the re-routing of emissions (up to 30 percent) from the Unit 8 stack (emission point number [EPN] WAP8) to EPN SCRUB, which is authorized under Permit Numbers 98664, PSDTX1268, and N138.

As indicated in Title 30 Texas Administrative Code § 116.116(c) [30 TAC § 116.116(c)], and based on our review, Permit Number 7704 is altered. Enclosed are the altered special conditions, MAERT and a new permit face to replace those currently attached to your permit. Please attach these to your permit.

Planned maintenance, startup, and shutdown emissions have been previously reviewed, authorized, and included in the MAERT. Any other maintenance activities are not authorized by this permit and will need to obtain a separate authorization.

Your cooperation in this matter is appreciated. If you need further information or have any questions, please contact Mr. Tan Nguyen, P.E. at (512) 239-3445 or write to the Texas Commission on Environmental Quality, Office of Air, Air Permits Division, MC-163, P.O. Box 13087, Austin, Texas 78711-3087.

Re: Permit Number: 7704

This action is taken under authority delegated by the Executive Director of the Texas Commission on Environmental Quality.

Sincerely,

Michael Wilson, P.E., Director
Air Permits Division
Office of Air
Texas Commission on Environmental Quality

MPW/tn

Enclosure

cc: Air Section Manager, Region 12 - Houston
Air Permits Section Chief, New Source Review, Section (6PD-R), U.S. Environmental Protection Agency, Region 6, Dallas

Project Number: 184569

TEXAS CO MISSION ON ENVIRONMEN L QUALITY
AIR QUALITY PERMIT

A Permit Is Hereby Issued To
NRG Texas Power LLC
Authorizing the Construction and Operation of
W. A. Parish Electric Generating Station Unit 8
Located at **Thompsons, Fort Bend County, Texas**
Latitude 29° 28′ 41″ Longitude 95° 38′ 08″

Permits: 7704 and PSDTX234M2

Revision Date : December 21, 2012

Renewal Date: January 24, 2021

For the Commission

1. **Facilities** covered by this permit shall be constructed and operated as specified in the application for the permit. All representations regarding construction plans and operation procedures contained in the permit application shall be conditions upon which the permit is issued. Variations from these representations shall be unlawful unless the permit holder first makes application to the Texas Commission on Environmental Quality (commission) Executive Director to amend this permit in that regard and such amendment is approved. [Title 30 Texas Administrative Code 116.116 (30 TAC 116.116)]
2. **Voiding of Permit**. A permit or permit amendment is automatically void if the holder fails to begin construction within 18 months of the date of issuance, discontinues construction for more than 18 months prior to completion, or fails to complete construction within a reasonable time. Upon request, the executive director may grant an 18-month extension. Before the extension is granted the permit may be subject to revision based on best available control technology, lowest achievable emission rate, and netting or offsets as applicable. One additional extension of up to 18 months may be granted if the permit holder demonstrates that emissions from the facility will comply with all rules and regulations of the commission, the intent of the Texas Clean Air Act (TCAA), including protection of the public's health and physical property; and (b)(1)the permit holder is a party to litigation not of the permit holder's initiation regarding the issuance of the permit; or (b)(2) the permit holder has spent, or committed to spend, at least 10 percent of the estimated total cost of the project up to a maximum of $5 million. A permit holder granted an extension under subsection (b)(1) of this section may receive one subsequent extension if the permit holder meets the conditions of subsection (b)(2) of this section. [30 TAC 116.120(a), (b) and (c)]
3. **Construction Progress**. Start of construction, construction interruptions exceeding 45 days, and completion of construction shall be reported to the appropriate regional office of the commission not later than 15 working days after occurrence of the event. [30 TAC 116.115(b)(2)(A)]
4. **Start-up Notification**. The appropriate air program regional office shall be notified prior to the commencement of operations of the facilities authorized by the permit in such a manner that a representative of the commission may be present. The permit holder shall provide a separate notification for the commencement of operations for each unit of phased construction, which may involve a series of units commencing operations at different times. Prior to operation of the facilities authorized by the permit, the permit holder shall identify the source or sources of allowances to be utilized for compliance with Chapter 101, Subchapter H, Division 3 of this title (relating to Mass Emissions Cap and Trade Program). [30 TAC 116.115(b)(2)(B)(iii)]
5. **Sampling Requirements**. If sampling is required, the permit holder shall contact the commission's Office of Compliance and Enforcement prior to sampling to obtain the proper data forms and procedures. All sampling and testing procedures must be approved by the executive director and coordinated with the regional representatives of the commission. The permit holder is also responsible for providing sampling facilities and conducting the sampling operations or contracting with an independent sampling consultant. [30 TAC 116.115(b)(2)(C)]

6. **Equivalency of Methods.** The permit holder must demonstrate or otherwise justify the equivalency of emission control methods, sampling or other emission testing methods, and monitoring methods proposed as alternatives to methods indicated in the conditions of the permit. Alternative methods shall be applied for in writing and must be reviewed and approved by the executive director prior to their use in fulfilling any requirements of the permit. [30 TAC 116.115(b)(2)(D)]
7. **Recordkeeping.** The permit holder shall maintain a copy of the permit along with records containing the information and data sufficient to demonstrate compliance with the permit, including production records and operating hours; keep all required records in a file at the plant site. If, however, the facility normally operates unattended, records shall be maintained at the nearest staffed location within Texas specified in the application; make the records available at the request of personnel from the commission or any air pollution control program having jurisdiction; comply with any additional recordkeeping requirements specified in special conditions attached to the permit; and retain information in the file for at least two years following the date that the information or data is obtained. [30 TAC 116.115(b)(2)(E)]
8. **Maximum Allowable Emission Rates.** The total emissions of air contaminants from any of the sources of emissions must not exceed the values stated on the table attached to the permit entitled "Emission Sources--Maximum Allowable Emission Rates." [30 TAC 116.115(b)(2)(F)]
9. **Maintenance of Emission Control.** The permitted facilities shall not be operated unless all air pollution emission capture and abatement equipment is maintained in good working order and operating properly during normal facility operations. The permit holder shall provide notification for upsets and maintenance in accordance with 30 TAC 101.201, 101.211, and 101.221 of this title (relating to Emissions Event Reporting and Recordkeeping Requirements; Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements; and Operational Requirements). [30 TAC 116.115(b)(2)(G)]
10. **Compliance with Rules.** Acceptance of a permit by an applicant constitutes an acknowledgment and agreement that the permit holder will comply with all rules, regulations, and orders of the commission issued in conformity with the TCAA and the conditions precedent to the granting of the permit. If more than one state or federal rule or regulation or permit condition is applicable, the most stringent limit or condition shall govern and be the standard by which compliance shall be demonstrated. Acceptance includes consent to the entrance of commission employees and agents into the permitted premises at reasonable times to investigate conditions relating to the emission or concentration of air contaminants, including compliance with the permit. [30 TAC 116.115(b)(2)(H)]
11. **This** permit may not be transferred, assigned, or conveyed by the holder except as provided by rule. [30 TAC 116.110(e)]
12. **There** may be additional special conditions attached to a permit upon issuance or modification of the permit. Such conditions in a permit may be more restrictive than the requirements of Title 30 of the Texas Administrative Code. [30 TAC 116.115(c)]
13. **Emissions** from this facility must not cause or contribute to a condition of "air pollution" as defined in Texas Health and Safety Code (THSC) 382.003(3) or violate THSC 382.085. If the executive director determines that such a condition or violation occurs, the holder shall implement additional abatement measures as necessary to control or prevent the condition or violation.
14. **The** permit holder shall comply with all the requirements of this permit. Emissions that exceed the limits of this permit are not authorized and are violations of this permit.

Special Conditions

Permit Numbers 7704 and PSDTX234M2

Federal Applicability

1. The Pulverized Coal Boiler, identified as WA Parish Unit 8 and Emission Point Number (EPN) WAP8, shall comply with applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations in Title 40 Code of Federal Regulations (40 CFR) Part 60, Standards of Performance for New Stationary Sources, Subpart A, General Conditions, and Subpart Da, Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978.

WA Parish Unit 8 Fuel Specifications, Operating Limitations, Performance Standards, and Construction Specifications

2. Fuels fired in WA Parish Unit 8 are limited to:

   A. low sulfur subbituminous coal;

   B. sweet natural gas as defined in Title 30 Texas Administrative Code (30 TAC) Chapter 101; and

   C. distillate oil.

   D. Use of any other fuel will require prior approval of the Executive Director of the Texas Commission on Environmental Quality (TCEQ).

3. WA Parish Unit 8

   A. WA Parish Unit 8 is limited to a maximum heat input which corresponds to an average electric generation rate of 660 megawatts (MW). Compliance with this condition shall be demonstrated by maintaining records of the hourly generation rate. Generation rates, on a three-hour average, at or below this rate comply with this condition. Any three-hour average value in excess of 660 MW shall be identified in the quarterly emission report. Demonstration of compliance with this condition shall also demonstrate compliance with the WA Parish Unit 8 emission limits on the attached table titled "Emission Sources - Maximum Allowable Emission Rates" for pollutants not monitored by continuous emission monitoring systems. Notwithstanding, the Executive Director of the TCEQ or his designated representative may also require sampling to directly measure the lb/hr emission rate, in which case the sampled lb/hr emission rate will be used to determine compliance with the applicable emission rate in the Maximum Allowable Emission Rate Table (MAERT).

   B. Within 180 days after start-up, testing shall be performed to confirm that the unit is operating within the specified maximum heat input. The TCEQ shall be provided a copy of the test results within 45 days. If the maximum heat input is higher than the limit established above, the holder of this permit will apply for a permit amendment.

4. Emissions of nitrogen oxides (NO_x) from EPN WAP8 shall comply with applicable requirements of 30 TAC Chapter 117. If any condition of this permit is more stringent than the regulations so incorporated, then for the purposes of complying with this permit, the permit shall govern and be the standard by which compliance shall be demonstrated.

5. The wet limestone scrubber system shall operate with no less than 70 percent efficiency in removal of sulfur dioxide (SO_2) from the flue gas, with a 30-day averaging period, in accordance with 40 CFR § 60.43.

6. Opacity of emission from the steam generating unit must not exceed 10 percent as determined by EPA Reference Method 9 or by continuous opacity monitoring system (COMS) averaged over a six-minute period, except during periods of routine maintenance, start-up, or shutdown (MSS) or as otherwise allowed by law. During periods of MSS, the opacity shall not exceed 20 percent over a six-minute period. **(4/12)**

7. Stack sampling ports and platform(s) shall be constructed and maintained on EPN WAP8 as specified in the attachment entitled "Chapter 2, Stack Sampling Facilities," or an alternate design may be required at a later date if determined necessary by the TCEQ Regional Director in Houston.

8. The permit holder is authorized to emit from EPN SCRUB (authorized under Permit Numbers 98664, PSDTX1268, and N138) those emissions from EPN WAP8 that have been rerouted to EPN SCRUB from the existing Unit 8 duct work at a point upstream of the Unit 8 stack and downstream of the Unit 8 air quality control systems. The emissions from EPN WAP8 and EPN SCRUB shall not exceed the combined maximum allowable emission rates for those EPNs authorized under this permit and Permit Numbers 98664, PSDTX1268, and N138. **(12/12)**

Limestone and Scrubber Sludge Waste Material Handling – Design and Operating Specifications

9. Compliance with the permitted emission limits for EPNs LH1, LH1A, LH2, LH5, and LH6 is based upon maximum throughputs of 500 tons per hour and 52,000 tons per year of limestone, as measured by railcar and truck unloading records.

10. As determined by a certified opacity observer with delegation from the Executive Director of the TCEQ, opacity of emissions averaged over a six-minute period, and according to EPA Test Method (TM) 9 or equivalent shall not exceed from any limestone:

    A. screen or transfer point on belt conveyors - 10 percent; and

    B. crusher - 15 percent.

11. As determined by a trained observer with delegation from the Executive Director of the TCEQ, no visible fugitive emissions of limestone from the railcar unloading, crusher,

screens, transfer points on belt conveyors, material storage or feed bins, or stockpiles shall leave the property. Visible emissions shall be determined by EPA TM 22 or equivalent. If this condition is violated, additional controls or process changes may be required to limit visible PM emissions.

12. All fabric filter baghouses used to control limestone dust will operate with reverse air cleaning, shall be properly installed, and shall be maintained in good working condition. The baghouses shall not exceed 5 percent opacity averaged over a six-minute period when adjusted for uncombined water vapor.

13. The company has represented the following regarding limestone material handling to comply with all TCEQ rules and regulations:

    A. Permanently mounted spray nozzles shall be installed at the railcar unloading point and shall be operated to control visible emissions as needed.

    B. Plant roads used by limestone delivery trucks shall be paved with a cohesive hard surface which can be cleaned by sweeping or washing. All roads used for limestone delivery shall be sprinkled with water and/or environmentally sensitive chemicals as necessary to maintain compliance with all TCEQ rules and regulations.

    C. All limestone conveyors shall be enclosed. Emissions from Conveyor No. 1 shall be controlled by loading the stockpile using a telescopic chute, maintaining the stockpile covered, and an Underground Reclaim System (EPN LH2). Conveyor No. 2 feeds the limestone from the underground reclaim system to the crusher. The emissions from the crusher are vented to a Baghouse (EPN LH5). Conveyor No. 3 delivers the crushed limestone to the limestone storage silo. Emissions from the storage silo are controlled by a Baghouse (EPN LH6).

    D. The company will maintain all abatement systems in good working order and immediately make appropriate corrections and/or repairs to any facility equipment if Special Condition Nos. 10 or 11 cannot be met. All corrections and/or repairs shall be completed within five working days or the system involved shall not be operated.

14. As determined by a certified opacity observer with delegation from the Executive Director of the TCEQ and according to EPA TM 9 or equivalent, opacity of emissions from the pug mill scrubber stack, identified as EPN No. WH1, shall not exceed 20 percent, when adjusted for uncombined water vapor, averaged over a six-minute period, except for those times described in 40 CFR Part 60, Subpart A, § 60.11(c).

Stack Testing Demonstration of Compliance

15. If required by the Executive Director of the TCEQ, the holder of this permit shall perform stack sampling and other testing as required to establish the actual pattern and

quantities of air contaminants being emitted into the atmosphere from EPN WAP8. The holder of this permit is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at his expense.

A. The TCEQ Regional Office in Houston shall be contacted as soon as testing is scheduled, but not less than 45 days prior to sampling to schedule a pretest meeting.

(1) The notice shall include:

(a) Date for pretest meeting.

(b) Date sampling will occur.

(c) Name of firm conducting sampling.

(d) Type of sampling equipment to be used.

(e) Method or procedure to be used in sampling.

(2) The purpose of the pretest meeting is to review the necessary sampling and testing procedures, to provide the proper data forms for recording pertinent data, and to review the format procedures for submitting the test reports.

(3) Prior to the pretest meeting, a written proposed description of any deviation from sampling procedures specified in permit conditions or TCEQ or EPA sampling procedures shall be made available to the TCEQ. The TCEQ Houston Regional Director shall approve or disapprove of any deviation from specified sampling procedures. Requests to waive testing for any pollutant specified in B of this condition, for NSPS testing, or alternate or equivalent procedure proposals for NSPS testing which must have EPA approval, shall be submitted to the TCEQ Office of Air, Air Permits Division in Austin.

B. Air contaminants emitted from EPN WAP8 to be tested for include (but are not limited to) NO_x, carbon monoxide (CO), SO_2, volatile organic compounds, and particulate matter (PM) with a diameter of less than 10 microns.

C. Sampling shall occur as may be required by the Executive Director of the TCEQ. Additional time to comply with the applicable requirements of 40 CFR Part 60 and 40 CFR Part 61 requires EPA approval and requests shall be submitted to the TCEQ Air Permits Division.

D. WA Parish Unit 8 shall operate at maximum production rates during stack emission testing. Primary operating parameters that enable determination of a production rate shall be monitored and recorded during the stack test. These

parameters are to be determined at the pretest meeting. If the unit is unable to operate at maximum rates during testing, then future production rates may be limited to the rates established during testing. Additional stack testing may be required when higher production rates are achieved.

E. Two copies of the final sampling report shall be forwarded to the TCEQ within 30 days after sampling is completed. Sampling reports shall comply with the attached conditions of Chapter 14 of the TCEQ Sampling Procedures Manual. The reports shall be distributed as follows:

(1) One copy to the TCEQ Houston Regional Office.

(2) One copy to the TCEQ Air Permits Division.

Continuous Demonstration of Compliance

16. WA Parish Unit 8

A. The holder of this permit shall install, calibrate, operate, and maintain a continuous emissions monitoring system (CEMS) on the stacks of WA Parish Unit 8, EPN WAP8 and EPN SCRUB (authorized under Permit Numbers 98664, PSDTX1268, and N138), to measure and record the concentrations of NO_x, SO_2, and diluent (oxygen or carbon dioxide) according to the methods and procedures as set out in 40 CFR § 60.49Da. Reporting of monitoring data shall be in accordance with methods and procedures as set out in 40 CFR §§ 60.7 and 60.51Da. Compliance with the continuous emissions monitoring requirements above can be demonstrated by meeting the requirements of 40 CFR Part 75 provided that the holder of this permit demonstrates compliance with all applicable NSPS regulations. **(12/12)**

B. The continuous monitoring data shall also be used to determine compliance with the emission limitations in the attached MAERT.

Periodic Monitoring for Limestone and Scrubber Waste Material Handling Sources

17. Ongoing compliance with the opacity limits of Special Condition Nos. 10, 12, and 14, and the PM emission limits of the non-fugitive sources on the MAERT (except EPN WAP8) shall be demonstrated by observing for visible emissions and conditionally for opacity, while the facility is operating.

A. Observations for visible emissions using RM 22 from each source shall be made:

(1) monthly; and

(2) at least 15 feet but no more than 0.25 mile from the emission point.

B. Up to three emission points may be read concurrently, provided that each point read concurrently is within a 70 degree viewing sector or angle in front of the observer such that the proper sun position (at the observer's back) can be maintained for each point.

C. If visible emissions are observed from the source using RM 22, then either:

(1) within 24 hours, opacity shall be determined by 40 CFR Part 60, TM 9; or

(2) any visible emissions will be treated as exceeding the applicable opacity limit.

D. If opacity exceeds the applicable limit, corrective action to eliminate the source of visible emissions shall be taken promptly and documented within one week of first observation.

E. For non-fugitive material handling sources, the Executive Director or his designated representative may also require sampling conducted in accordance with the methods and procedures specified in Special Condition No. 15 to directly measure the lb/hr emission rate, in which case the sampled lb/hr emission rate will be used to determine compliance with the applicable emission rate in the MAERT.

18. Ongoing compliance with Special Condition No. 11 and the fugitive source emission rates in the MAERT shall be demonstrated by observing each source monthly for visible emissions leaving the property using 40 CFR Part 60, TM 22.

A. The observation period when conducting TM 22 shall extend at least five minutes (unless visible emissions are observed, in which case the observer may stop the test and initiate action to correct the problem in accordance with C. of this Special Condition) during normal operations.

B. Contributions from uncombined water shall not be included in determining compliance.

C. If visible emissions are observed crossing the property line, then an evaluation of and identification of the source and cause of the visible emissions shall be conducted within 24 hours and documented. Corrective action to eliminate the source of visible emissions shall be taken promptly and documented within one week of first observation of the visible emissions.

Recordkeeping Requirements

19. Records shall be kept for at least five years rather than the two-year period specified in General Condition No. 7 on the permit face. The five-year record retention requirement

does not apply to records generated before December, 2010. The records shall reflect compliance with 30 TAC § 116.115(b)(2)(E) and shall include the following:

A. Daily and annual amounts of limestone unloaded by rail and truck;

B. Daily cleaning of roads used by the limestone delivery trucks; and

C. Records of all repair and maintenance of limestone dust abatement systems.

D. Records of monthly observations for visible emissions or opacity required by Special Condition Nos. 17 and 18.

E. The CEMS data of NO_x, SO_2, and diluent emissions from EPN WAP8 and EPN SCRUB to demonstrate compliance with the emission limits in the MAERT. **(12/12)**

F. Raw data files of all CEMS data including calibration checks, adjustments, and maintenance performed on these systems in a permanent form suitable for inspection. **(12/12)**

Consolidation by Reference of Related Authorizations

20. Boiler and economizer ash truck loading

A. The boiler stack hourly emission rates of NO_x, CO, and ammonia on the MAERT are authorized by Standard Permit Number 45779, issued March 29, 2001, with changes to permit representations dated December 22, 2006.

B. The economizer ash truck loading emissions on the MAERT are authorized by Standard Permit Number 45779, issued March 29, 2001.

Routine Maintenance, Startup, and Shutdown

21. This permit authorizes the emissions from the planned maintenance, startup, and shutdown (MSS) activities listed in Attachment A, Attachment B, or the MAERT attached to this permit. Attachment A identifies the inherently low emitting (ILE) planned maintenance activities that this permit authorizes to be performed. Attachment B identifies the planned MSS activities that are non-ILE planned maintenance activities that this permit authorizes to be performed. **(4/12)**

22. The holder of this permit shall minimize emissions during planned MSS activities by operating the facility and associated air pollution control equipment in accordance with good air pollution control practices, safe operating practices, and protection of the facility. **(4/12)**

23. The CO and NH_3 mass emissions limits in the MAERT attached to this permit that apply during planned MSS activities constitute alternative case specific specifications for the CO and NH_3 concentration limits in Title 30 Texas Administrative Code (30 TAC) Chapter 117.1210(b) during planned MSS activities. **(4/12)**

24. Emissions during planned startup and shutdown activities will be minimized by limiting the duration of operation in planned startup and shutdown mode as follows: **(4/12)**

    A. A planned startup of the electric generating facility (EGF), WA Parish Unit 8, is defined as the period that begins with initial fuel flow to the boiler and is complete when the boiler is released to dispatch. A planned startup event shall not exceed 2,880 minutes in duration. Extended startups lasting longer than 2,880 minutes in duration are allowed provided the total hours of extended startups do not exceed 600 hours per unit per year.

    B. A planned shutdown of the EGF, WA Parish Unit 8, is defined as the period that commences when dispatched requests a shutdown due to market conditions, or when plant personnel request a shutdown for maintenance and ends when fuel is no longer fired. A planned shutdown event shall not exceed 2,880 minutes in duration. Extended shutdowns lasting longer than 2,880 minutes in duration are allowed provided the total hours of extended shutdowns do not exceed 600 hours per unit per year.

25. When a planned maintenance activity identified in Attachment B is associated with a VOC liquid storage facility and may result in VOC emissions from that facility, the permit holder shall not open that facility to the atmosphere in connection with the planned maintenance activity until the VOC liquids are removed from that facility to the maximum extent practicable. **(4/12)**

26. No vacuum pump on a vacuum truck that is used to move solids (such as ash) during planned maintenance activities shall be operated unless the vacuum system exhaust is routed to a filtering system. **(4/12)**

27. Vacuum trucks that are used to move liquids with a vapor pressure greater than 0.5 psia during planned maintenance activities shall utilize submerged loading. **(4/12)**

28. Compliance with the emissions limits for planned MSS activities identified in the MAERT attached to this permit may be demonstrated as follows. **(4/12)**

    A. For each pollutant emitted during ILE planned maintenance activities, the permit holder shall annually confirm the continued validity of the estimated potential to emit represented in the permit application for all ILE planned maintenance activities. The total emissions from all ILE planned maintenance activities (See Attachment A) shall be considered to be no more than the estimated potential to emit for those activities that are represented in the permit application.

B. For each pollutant emitted during non-ILE planned MSS activities (See Attachment B) whose emissions are measured using a CEMS, as per Special Condition No. 29A, the permit holder shall compare the pollutant's short-term (hourly) emissions during planned MSS activities as measured by the CEMS to the applicable short-term planned MSS emissions limit in the MAERT.

C. For each pollutant emitted during non-ILE planned MSS activities (See Attachment B) whose emissions occur through a stack, but are not measured using CEMS as per Special Condition No. 29A, the permit holder shall determine the total emissions of the pollutant through the stack that result from such non-ILE planned MSS activities in accordance with Special Condition No. 29B.

D. For each pollutant emitted during non-ILE planned MSS activities (See Attachment B) whose emissions do not occur through a stack, the permit holder shall do the following for each calendar month.

(1) Determine the total emissions of the pollutant from such non-ILE planned MSS activities in accordance with Special Condition No. 29B.

(2) Once monthly emissions have been determined in accordance with Special Condition No. 28D(1) for 12 months after the MSS permit amendment has been issued, the permit holder shall compare the sum of the rolling 12-month emissions, for the pollutant for all non-ILE planned MSS activities and the annual potential to emit for the pollutant from all ILE planned MSS activities (as referenced in Special Condition 28A), to the annual emissions limit for the pollutant in the MAERT.

29. The permit holder shall determine the emissions during planned MSS activities for use in Special Condition No. 28 as follows. **(4/12)**

A. For each pollutant whose emissions during normal facility operations are measured with a CEMS that has been certified to measure the pollutant's emissions over the entire range of a planned MSS activity, the permit holder shall measure the emissions of the pollutant during the planned MSS activity using the CEMS.

B. For each pollutant not described in Special Condition No. 29A, the permit holder shall calculate the pollutant's emissions during all occurrences of each type of planned MSS activity for each calendar month using the frequency of the planned MSS activity identified in work orders or equivalent records and the emissions of the pollutant during the planned MSS activity as represented in the planned MSS permit application. In lieu of using the emissions of the pollutant during the planned MSS activity as represented in the planned MSS permit application to calculate such emissions, the permit holder may determine the emissions of the pollutant during the planned MSS activity using an appropriate method, including but not limited to, any of the methods described in paragraphs 1

through 4 below, provided that the permit holder maintains appropriate records supporting such determination:

(1) Use of emission factor(s), facility-specific parameter(s), and/or engineering knowledge of the facility's operations.

(2) Use of emissions data measured (by a CEMS or during emissions testing) during the same type of planned MSS activity occurring at or on a similar facility, and correlation of that data with the facility's relevant operating parameters, including, but not limited to, electric load, temperature, fuel input, and fuel sulfur content.

(3) Use of emissions testing data collected during a planned MSS activity occurring at or on the facility, and correlation of that data with the facility's relevant operating parameters, including, but not limited to, electric load, temperature, fuel input, and fuel sulfur content.

(4) Use of parametric monitoring system (PEMS) data applicable to the facility.

30. With the exception of the emission limits in the MAERT attached to this permit, the permit conditions relating to planned MSS activities do not become effective until 180 days after issuance of the permit amendment that added such conditions. **(4/12)**

Permits by Rule and Standard Permits

31. The following maintenance activities at the site are currently authorized by permits by rule (PBR) under 30 TAC Chapter 106 or PBR predecessor standard exemptions (SE) to 30 TAC Chapter 116. This list is not intended to be all inclusive and can be altered at the site without modification to this permit. The standard permit identified below was issued under 30 TAC Chapter 116. **(4/12)**

Description	PBR, SE, Standard Permit No.
Comfort Heating System Maintenance and Repair	SE 003, 106.102
Bench Scale laboratory Equipment	SE 034, 106.122
Brazing, Soldering, and Welding	SE 039, 106.227
Enclosed and Outdoor Dry Abrasive Blasting	106.263
Miscellaneous Surface Coating	106.263
Hand-Held Equipment for Buffing, Polishing, Cutting, Drilling, Sawing, Grinding, Turning, or Machining Wood, Metal or Plastic	SE 040, 106.265
Refrigeration System maintenance and Repair	SE 103, 106.373
Solvent Cleaning-Parts Degreaser	SE 107, 106.454

Description	PBR, SE, Standard Permit No.
Portable Engines	SE 005, 106.511
Water and Wastewater Treatment	SE 061, 106.532
Standard Permit for Pollution Controls	45779

Date: December 21, 2012

Attachment A

Permit Numbers 7704 and PSDTX234M2

Inherently Low Emitting (ILE) Planned Maintenance Activities

Planned Maintenance Activity	Emissions					
	NH_3/ Urea	VOC	NO_x	CO	PM	SO_2
Water-based washing	X					
Miscellaneous particulate filter maintenance[1]	X					
Catalyst handling and maintenance	X					
Maintenance of storage vessels storing material with vapor pressure <0.5 psia	X	X				
Boiler general maintenance[2]	X					
Gaseous fuel venting (pipe length < 100 feet)	X					
Management of sludge from pits, ponds, sumps, and water conveyances[3]	X					
Organic chemical usage, not covered by "manual surface coating or solvent cleaning operations" or by "use and disposal of aerosol products"	X					
Inspection, repair, replacement, adjusting, testing, and calibration of analytical equipment, process instruments including sight glasses, meters, gauges, CEMS, PEMS	X	X	X	X		
Deslagging of boiler[4]	X	X	X	X		
Material handling system maintenance[5]	X					
Small equipment and fugitive component repair/replacement in VOC and inorganic service[6]	X	X				

Notes:

1. Includes, but is not limited to, baghouse filters, ash silo/transfer filters, coal handling filters, process-related building air filters, and combustion turbine air intake filters.
2. Includes pre-heater basket handling and maintenance, refractory change-out, fan maintenance and balancing, damper, air heater, and soot blower maintenance, and any other general boiler maintenance that does not exceed the worst-case emissions representation in the application.
3. Includes, but is not limited to, management by vacuum truck/dewatering of materials in open pits and ponds, and sumps, tanks and other closed or open vessels. Materials managed include water and sludge mixtures containing miscellaneous VOCs such as diesel, lube oil, and other waste oils.
4. Includes, but is not limited to, explosive blasting, clinker shooting, and other boiler deslagging activities; does not include dry abrasive blasting that may occur in boilers.
5. Material handling system equipment includes, but is not limited to, silos, transport systems, coal bunkers, coal crushing equipment, coal handling, nuvafeeders, hoppers,

FGD sludge handling system. Materials handled include coal, ash, limestone, gypsum, mercury, and sorbents.

6. Includes, but is not limited to, (i) repair/replacement of pumps, compressors, valves, pipes, flanges, transport lines, filters and screens in natural gas, fuel oil, diesel oil, ammonia, lube oil, and gasoline service, (ii) vehicle and mobile equipment maintenance that may involve small VOC emissions, such as oil changes, transmission service, and hydraulic system service, and (iii) off-line NOx control device maintenance (including maintenance of the anhydrous ammonia systems and aqueous ammonia systems associated with SCR systems and SNCR systems)

Date: April 30, 2012

Attachment B

Permit Numbers 7704 and PSDTX234M2

Non-Inherently Low Emitting Planned MSS Activities

Planned Maintenance Activity	EPN	Emissions					
		NH_3/ Urea	VOC	NO_x	CO	PM	SO_2
Combustion optimization[1]	WAP8	X	X	X	X	X	
Vacuum truck solids loading[2] and unloading	MSSFUG[5]	X					
NO_x control device maintenance - unit online	WAP8	X	X				
PM control device maintenance - unit online	WAP8	X					
Flue gas conditioning system maintenance fugitives - unit offline[3]	MSSFUG[5]	X	X				
Maintenance of storage vessels storing gasoline or other material with vapor pressure >0.5 psia that does not require clearing of the vessels to allow for entry of personnel	MSSFUG[5]	X	X				
Gaseous fuel venting (pipe length > 100 feet)	MSSFUG[5]	X					
Portable small engines[4]	MSSFUG[5]	X	X	X	X	X	
Use of fans during maintenance - unit offline	WAP8	X					
Main unit Planned Startup and Planned Shutdown	WAP8	X	X	X	X	X	X

Notes:

1. Includes, but is not limited to, (i) leak and operability checks (e.g., turbine over-speed tests, troubleshooting), (ii) balancing, and (iii) tuning activities that occur during seasonal tuning or after the completion of initial construction, a combustor change-out, a major repair, maintenance to a combustor, or other similar circumstances.
2. Includes site-wide solids vacuuming operations (e.g., SCR, baghouse, ESP, ducts, furnace, loop seals, stripper coolers, and airlocks).
3. Includes, but is not limited to, maintenance of anhydrous ammonia systems and aqueous ammonia systems used to condition flue gas before it is controlled by a PM control device.
4. Includes engines used onsite for longer than twelve consecutive months.

5. Emission point MSSFUG represents permitted site-wide MSS fugitive emissions. MSSFUG emissions are quantified in the maximum allowable emissions rate table in Permit No. 7704 and PSDTX234M2.

Date: April 30, 2012

Emission Sources - Maximum Allowable Emission Rates

Permit Numbers 7704 and PSDTX234M2

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities, sources, and related activities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

Air Contaminants Data

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour (4), (5)	TPY (4), (6)
WAP8	WA Parish Unit No. 8 Pulverized Coal Boiler Stack (6,700 MMBtu/hr)	NO_x (7), (8)	2,000	7,008
		SO_2 (9)	2,063	4,081
		CO (8)	2,010	4,402
		VOC	20.1	53
		PM	172	639
		PM_{10}	172	639
		H_2SO_4	10.1	40
		NH_3 (8)	44.3	194
		Pb	0.33	0.13
		HF	34	29.3
		As	0.12	0.05
		Be	0.025	0.02
		Cd	0.04	0.04
		Cl	5.06	20
		Cr	0.13	0.17
		Hg	0.30	0.24
		Mn	0.11	0.44
		Ni	0.32	0.25
		Se	0.51	0.11

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour (4), (5)	TPY (4), (6)
WAP8 and SCRUB (20)	WA Parish Unit No. 8 Pulverized Coal Boiler Stack and Rerouted Exhaust Vent Stream Stack	SO_2 (9)	1,370	4,081 (14)
		SO_2 (9)	1,370	3,981 (15)
		SO_2 (9)	1,370	3,881 (16)
		SO_2 (9)	1,370	3,781 (17)
		SO_2 (9)	1,370	3,681 (18)
		NO_x	1,260	6,307 (19)
MCT8	Cooling Tower (10)	PM	0.95	4.1
		PM_{10}	0.95	4.1
LH1	Railcar Unloading to Track Hopper Limestone Fugitives (11)	PM	30	1.6
		PM_{10}	15	0.8
LH1A	Track Hopper Feed to Conveyor #1 Limestone Fugitives (11)	PM	0.54	0.05
		PM_{10}	0.26	0.02
LH2	Limestone Stockpile (11)	PM	0.0030	0.13
		PM_{10}	0.0015	0.06
LH5	Limestone Stockpile Reclaim, Conveyor #2, and Crusher Baghouse	PM_{10}	2.1	1.1
LH6	Limestone Storage Silo Baghouse	PM_{10}	0.39	0.20
WH1	Pug Mill Scrubber Stack (Wet Venturi Dust Collector) (12)	PM	1.7	1.4
		PM_{10}	1.7	1.4
WH2	Fly Ash Feed Tank Baghouse - Stack (12)	PM	0.43	0.25
		PM_{10}	0.43	0.25
WH3	Radial Conveyor / Stack out of Scrubber Sludge/Fly Ash Blend (11), (12)	PM	0.03	0.02
		PM_{10}	0.014	0.01

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour (4), (5)	TPY (4), (6)
WH4	Stabilized Sludge Storage Pile (11), (12)	PM	0.20	0.87
		PM_{10}	0.10	0.41
8EA	Economizer Ash Truck Loading (12), (13)	PM	0.62	0.03
MSSFUG	Miscellaneous Site-Wide Maintenance Activities	SO_2	0.02	0.01
		NH_3	7.67	1.08
		CO	0.12	0.05
		NO_x	0.32	0.16
		VOC	75.97	4.74
		PM	14.80	4.97
		PM_{10}	3.55	2.47
		$PM_{2.5}$	3.37	1.23

(1) Emission point identification - either specific equipment designation or emission point number from plot plan.
(2) Specific point source name. For fugitive sources, use area name or fugitive source name.
(3) NO_x - total oxides of nitrogen
NH_3 - ammonia
SO_2 - sulfur dioxide
CO - carbon monoxide
VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
PM - total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$, as represented
PM_{10} - total particulate matter equal to or less than 10 microns in diameter, including PM2.5, as represented. Where PM is not listed, it shall be assumed that no particulate matter greater than 10 microns is emitted.
$PM_{2.5}$ - particulate matter equal to or less than 2.5 microns in diameter
H_2SO_4 - sulfuric acid
Pb - lead
HF - hydrogen fluoride
As - arsenic
Be - beryllium
Cd - cadmium
Cl - chlorine
Cr - chromium
Hg - mercury

Emission Sources - Maximum Allowable Emission Rates

Mn - manganese
Ni - nickel
Se - selenium

(4) The pound per hour (lb/hr) and ton per year (tpy) emission limits specified in the MAERT for this facility includes emissions from the facility during both normal operations and planned MSS activities, unless otherwise noted.
(5) For each pollutant whose emissions during planned MSS activities are measured using a CEMS, the MSS lb/hr limits apply only during each clock hour that includes one or more minutes of MSS activities. During all other clock hours, the normal lb/hr limits apply.
(6) Compliance with annual emission limits is based on a rolling 12-month period.
(7) The hourly emission rate is based on a 30-day rolling average.
(8) Hourly emission rates of NO_x, CO, and NH_3 are those authorized by Standard Permit Number 45779, issued March 29, 2001, with changes to permit representations dated December 22, 2006.
(9) The hourly emission rate is based on a three-hour averaging period.
(10) Cooling tower emissions are authorized by 30 TAC 106.371.
(11) Fugitive emissions are an estimate and compliance is demonstrated by meeting the requirements of the applicable special conditions and representations in the permit application.
(12) Scrubber sludge waste handling emission limits are based on, and the facilities are limited by, the following production rates:

Pug Mills A or B	-	200 tons/hour
Fly Ash Silo	-	75 tons/hour
Radial Stacker Conveyor	-	200 tons/hour
Economizer Ash Silo/Tank	-	11.2 tons/day

(13) Economizer ash truck loading emissions are authorized by Standard Permit Number 45779.
(14) Combined (EPNs WAP8 and SCRUB) annual emission limit when the enhanced scrubber (EPN SCRUB) operates 0 - 500 hours in a rolling 12-month period. **(12/12)**
(15) Combined (EPNs WAP8 and SCRUB) annual emission limit when the enhanced scrubber (EPN SCRUB) operates 501 - 2000 hours in a rolling 12-month period. **(12/12)**
(16) Combined (EPNs WAP8 and SCRUB) annual emission limit when the enhanced scrubber (EPN SCRUB) operates 2001 - 4000 hours in a rolling 12-month period. **(12/12)**
(17) Combined (EPNs WAP8 and SCRUB) annual emission limit when the enhanced scrubber (EPN SCRUB) operates 4001 - 6000 hours in a rolling 12-month period. **(12/12)**
(18) Combined (EPNs WAP8 and SCRUB) annual emission limit when the enhanced scrubber (EPN SCRUB) operates 6001 - 8760 hours in a rolling 12-month period. **(12/12)**
(19) Combined (EPNs WAP8 and SCRUB) annual emission limit when the enhanced scrubber operates during a rolling 12-month period. **(12/12)**
(20) EPN SCRUB is authorized under Permit Numbers 98664, PSDTX1268, and N138. **(12/12)**

Date: December 21, 2012